

**Amendments to the claims:**

This listing of the claims will replace all prior versions and listings of the claims in the application:

1. (currently amended) A coaxial cable, comprising:  
a metallic inner conductor formed of a first material and having a first thickness;  
a dielectric layer circumferentially surrounding the inner conductor formed of a second material and having a second thickness;  
a metallic outer conductor circumferentially surrounding the dielectric layer formed of a third material and having a third thickness; and  
a polymeric jacket circumferentially surrounding the outer conductor formed of a fourth material and having a fourth thickness;

wherein at least one of the first material, first thickness, second material, second thickness, third material, third thickness, fourth material and fourth thickness is selected so that the cable has:

- (a) a usable bandwidth between about 5 MHz and the cut-off frequency of the cable;
- (b) a minimum bend radius of less than about 5 times the jacket outer diameter; and
- (c) a velocity of propagation of greater than about 88;
- (d) a return loss of at least about -25dB; and
- (e) a nominal impedance of 75 ohms.

2. (original) The coaxial cable defined in Claim 1, wherein at least one of the first material, first thickness, second material, second thickness, third material, third thickness, fourth material and fourth thickness is further selected so that the cable has a continuous usable bandwidth above about 1.0 GHz.

3. (original) The coaxial cable defined in Claim 1, wherein at least one of the first material, first thickness, second material, second thickness, third material, third thickness, fourth

material and fourth thickness is further selected so that the cable has a continuous bandwidth above about 3.0 GHz.

4. (canceled).

5. (canceled).

6. (canceled).

7. (canceled).

8. (original) The coaxial cable defined in Claim 1, wherein at least one of the first material, first thickness, second material, second thickness, third material, third thickness, fourth material and fourth thickness is further selected so that the cable has an attenuation spike due to return loss within the usable bandwidth.

9. (original) The coaxial cable defined in Claim 1, wherein the cable has a length of at least 1,000 feet.

10. (original) The coaxial cable defined in Claim 1, wherein the first material is selected from the group consisting of: copper; aluminum and steel clad with copper; and aluminum, copper and steel clad with silver.

11. (original) The coaxial cable defined in Claim 1, wherein the second material is a foamed polymeric material.

12. (previously presented) The coaxial cable defined in Claim 11, wherein the dielectric layer has a density gradient across its cross-section such that density increases with increasing radial distance from the inner conductor.

13. (original) The coaxial cable defined in Claim 1, wherein the third material is selected from the group consisting of solid copper and solid aluminum.

14. (original) The coaxial cable defined in Claim 1, wherein a corrosion-resistant material is interposed between the outer conductor and the jacket.

15. (original) The coaxial cable defined in Claim 16, wherein the corrosion-resistant material is a dry material.

16. (original) The coaxial cable defined in Claim 1, wherein the cable withstands at least 5 cycles in reverse bend fatigue tests.

Claims 17-49 (canceled).

50. (currently amended) A hybrid fiber cable (HFC) network, comprising:  
two coaxial cables as defined in ~~one of Claims 1, 18 and 34~~ Claim 1; and  
an optical fiber in communication with the coaxial cable, wherein together the coaxial cable and the optical fiber define a transmission path.

51. (original) The HFC network defined in Claim 50, wherein the optical fiber has a zero dispersion wavelength of about 1310 nm, a loss at 1385 nm that is less than its loss at 1310 nm and a chromatic dispersion of between 1.5 and 8.0 ps/nm-km in the 1.4  $\mu$ m wavelength region.

52. (original) The HFC network defined in Claim 50, further comprising a multiplexer in communication with the optical fiber.

53. (original) The HFC network defined in Claim 50, further comprising a wave-division multiplexer in communication with the optical fiber.

54. (original) The HFC network defined in Claim 50, wherein the optical fiber extends at least 10 kilometers along the travel path.

55. (currently amended) A hybrid fiber cable (HFC) network, comprising:  
two coaxial cables as defined in ~~one of Claims 1, 18 and 34~~ Claim 1; and  
an optical fiber in communication with the coaxial cable, wherein together the coaxial cable and the optical fiber define a transmission path, and wherein the optical fiber is in communication with the coaxial cables at a node.

56. (canceled).